

Applicants appreciate the courtesies shown to Applicants' representatives by Examiner Sergeant in the July 30, 2002 interview. Applicants' separate record of the substance of the interview is incorporated into the following remarks.

I. Rejections Under 35 U.S.C. §112

A. 35 U.S.C. §112, Second Paragraph

Claims 1-9 and 17-25 were rejected by the Patent Office under 35 U.S.C. §112, second paragraph as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. The rejection is respectfully traversed.

In particular, the Patent Office alleges that the word "based" in claim 1, line 4 is indefinite because it is unclear to what extent the film is based on or derived from the thermoplastic polyurethane.

By this Amendment, claim 1 is amended to revise "based on" to "comprising." The specification recites that the film is "based on" a thermoplastic polyurethane, but does not limit the thermoplastic polyurethane as being the only component of the film.

The Patent Office also alleges that in claim 1, component a), it is unclear whether a mixture is provided for.

By this Amendment, claim 1, component a) is amended to recite that the polyether glycol is derived from a starting material of polyethylene oxide glycol comprising 40 to 52 wt.% of a total weight of reactants, "with the proviso that at least 30 wt.% of the polyurethane being composed of a polyether glycol having an atomic ratio of carbon to oxygen in the range of 2.0 and 2.4." (Emphasis added). Thus, component a) recites that at least a certain amount of the polyurethane must have the smaller atomic ratio recited.

The Patent Office alleges that the word "may" in claim 1, component c) renders the claims indefinite because it is unclear as to what extent the language denoted by "may" is optional.

By this Amendment, the phrase "may be" is revised to be "is."

The Patent Office alleges that in claim 1, the phrase "less the amount of araliphatic diol" is unclear.

By this amendment, claim 1 is revised to delete the phrase "less the amount of araliphathic diol."

The language "calculated as ..." as recited in claim 1 allegedly rendered the claims indefinite because it was unclear if the components are defined as being those "calculated as" species.

By this Amendment, the language "calculated as ..." is revised to be "derived from a starting material of ..." Applicants submit that the revised language is clear and definite.

The Patent Office alleges that "the low-molecular weight chain extender" of claim 9 lacks antecedent basis. By this Amendment, claim 9 is canceled. Thus, the rejection of claim 9 is moot.

The Patent Office also alleges that it is unclear what definitive limitation is conveyed by "sports" in claim 22. By this Amendment, claim 22 is canceled. Thus, the rejection of claim 22 is now moot.

The Patent Office further alleges that it is not clear if component c) is mutually exclusive from component a) or component d).

By this Amendment, components c) and d) are combined in order to more clearly convey the aspects of the invention. Further, by suggestion of the Patent Office, claim 1 is amended to recite "in which a) is not c)" in order to expedite prosecution of the application.

In view of the foregoing amendments, Applicants submit that claims 1-8, 17-21 and 23-25 fully comply with the requirements of 35 U.S.C. §112, second paragraph .

Reconsideration and withdrawal of the rejection are respectfully requested.

B. 35 U.S.C. §112, First Paragraph

Claims 1-9 and 17-25 were rejected by the Patent Office as allegedly containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains to make and/or use the invention. The rejection is respectfully traversed.

In particular, the Patent Office alleges that the claims fail to specify whether the molecular weight for the polyether glycol is a weight average or number average molecular weight.

Applicants submit that the phrase "average molecular weight" in claim 1 is meant to be used generically, and that one of ordinary skill in the art would understand the term to be generic upon reading the specification.

Thus, Applicants submit that the phrase "average molecular weight" in the present invention is generic and fully enables the claimed invention to those of ordinary skill in the art. That is, one of ordinary skill in the art can readily determine without undue experimentation whether or not a molecular weight as determined by any desired methodology is within or without the ranges specified in the claims. Thus, the claims are clearly enabled by the specification.

In view of the foregoing, Applicants respectfully submit that claims 1-8, 17-21 and 23-25 fully comply with the requirements of 35 U.S.C. §112, first paragraph.


Reconsideration and withdrawal of the rejection are respectfully traversed.

II. Conclusion

In view of the foregoing amendments and remarks, Applicants submit that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-8, 17-21 and 23-25 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number listed below.

Respectfully submitted,



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WPB:DML/rxg

Attachment:  
Appendix

Date: August 2, 2002

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## APPENDIX

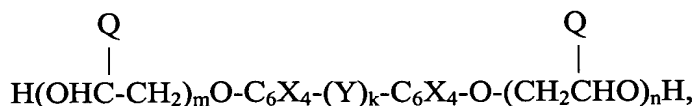
## Changes to Claims:

Claims 9 and 22 are canceled.

The following is a marked-up version of the amended claim(s):

1. (Amended) Non-porous, waterproof film having a water vapour permeability of at least 1000 g/m<sup>2</sup> day in accordance with ASTM E96-66 (Procedure B), with the proviso that the water temperature is kept at 30°C, while the ambient temperature is 21°C at 60% RH, ~~based on~~ comprising a thermoplastic polyurethane composed of a polyether glycol, a polyisocyanate, and a chain extender, at a ratio of NCO to active hydrogen atom of ~~0.9 to 1.2~~ 0.9 to 1.2, ~~characterised in that~~ wherein the polyurethane is composed of

- a) ~~40 to 52 wt.% of polyether glycol, calculated as~~ derived from a starting material of polyethylene oxide glycol comprising 40 to 52 wt.% of a total weight of reactants, having an average molecular weight of 800 to 4000 and an atomic ratio of carbon to oxygen in the range of ~~2.0 to 4.3~~ 2.0 to 4.3, with the proviso that at least 30 wt.% of the polyurethane ~~being~~ is composed of a polyether glycol having an atomic ratio of carbon to oxygen in the range of ~~2.0 to 2.4~~ 2.0 to 2.4,
- b) ~~30 to 45 wt.% of polyisocyanate, calculated as~~ derived from a starting material of 4,4'-diphenyl methane diisocyanate comprising 30 to 45 wt.% of the total weight of reactants, and
- c) ~~0.5 to 10 wt.% of~~ a chain extender and an ~~araliphatic~~ araliphatic diol of the formula



wherein k = 0 or 1, where if k = 1, Y stands for a methylene or isopropylidene group, Q has the meaning of an H-atom or a CH<sub>3</sub>-group, C<sub>6</sub>X<sub>4</sub> has the

meaning of a phenylene group wherein X is hydrogen or a chlorine or bromine atom, and m and n ~~may be~~ is the same or different and stand for an integer  $\geq 1$ , with  $m + n \leq 10$ , and

wherein the chain extender has a maximum molecular weight of 500 and is derived from a starting material of 1,4-butane diol, and wherein a total amount of 1,4-butane diol and araliphatic diol comprises 5 to 20 wt.% of the weight of the reactants such that the araliphatic diol comprises 0.5 to 10 wt.% of the total weight of the reactants,

wherein a) is not c)

d) ~~5 to 20 wt.% of a chain extender having a maximum molecular weight of 500, calculated as 1,4-butane diol, less the amount of araliphatic diol.~~